

Tillus occidentalis Goch.

Tarsostenus univittatus Rossi.

Teretrius lebatus Horn.

A small wasp.

Lyctus were very plentiful. I could count sixty of these before I was able to detect one of the other species. This adobe wall was two years old and as hard as stone, yet the larva of *Lyctus* had no difficulty in accomplishing the immense work of boring through this composition and changing the solid interior into a powdered substance analogous to flour. The three Cleridæ are undoubtedly parasites of *Lyctus* and the little wasp is also a parasite of either *Lyctus* or one of the Cleridæ. *Elasmocerus californicus* came out only in the forenoon between half past nine and half past eleven o'clock; the other insects were more abundant toward evening.

I did not take these insects at any other place, with the exception of *Tillus occidentalis*. This species would frequent also old logs, and toward evening would peep out of holes bored by Scolytidæ. On some occasions they would come out and run about a little, but it would not be long before they would return to these holes.

Class I, HEXAPODA.

Order IV, DIPTERA.

DIPTERA FROM SOUTHERN TEXAS WITH DESCRIPTIONS OF NEW SPECIES.

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During the past summer Mr. Charles Schaeffer spent several months collecting insects, chiefly Coleoptera, in the vicinity of Brownsville, Texas, in the interest of the Brooklyn Institute of Arts and Sciences, and secured, among other things, a small but very interesting collection of Diptera, a series of which was submitted to the writer for naming, and has been returned to the Institute again. This series contained representatives of nine apparently new species besides eight other species which, so far as I am aware, have never been recorded from the United States, their most northern accredited habitat being in

Mexico. These latter species are listed herewith while the descriptions of the new ones follow the list :

Plecia bicolor Bell.

Obliogaster tæniatus Bell.

Sphærophoria picticauda Bigot.

Rhopalosyrphus guntheri Arrib.

Sphiximorpha pedicellata Will.

Masicera picta Wulp.

Micropeza stigmatica Wulp.

Diacrita costalis Gerst.

***Cyphomyia schaefferi*, new species.**

Near *tomentosa*, but that species is credited with nearly hyaline, yellowish wings, a polished black front and face, etc. Black, the upper part of the head dark reddish-brown, scutellar spines, first two joints of the tarsi, and the halteres, yellowish ; front somewhat polished, bearing a transverse pair of widely separated tubercles above its middle, and midway between these and the antennæ is a transverse pair of nearly contiguous, highly polished callosities in contact with the eyes ; a narrow ridge extends from ocelli almost to the antennæ ; face somewhat polished, thinly covered with pale yellowish tomentum ; antennæ shorter than the thorax, the first joint twice as long as the second, the latter as wide as long, the third twice as long as the first two, of nearly an equal width, blunt-pointed at the apex, the eighth annulus shorter than the seventh ; eyes rather densely pilose, greenish and marked with about six transverse, undulating, purplish bands ; thorax and scutellum somewhat opaque, thinly covered with a short, pale yellowish tomentum ; abdomen somewhat opaque, its tomentum golden yellow, sparse on the first two segments but dense on the other two ; wings brownish, the base, proximal half of axillary cell, discal cell, upper outer angle of second basal cell and base of the first posterior cell, hyaline, stigma yellow ; length, 8 mm.

A female specimen collected in June. Respectfully dedicated to Mr. Charles Schaeffer.

***Pthiria unimaculata*, new species.**

Near *scolopax*, but each cheek marked with a single black spot. Head yellow, middle of front brown, a spot at the ocelli, the center of the occiput, and a large, subquadrate spot on each cheek just below the front and extending from the eye almost to the oral border, black ; antennæ and mouth parts black, proboscis slightly over one half as long as the head and body, apex of palpi about opposite middle of third antennal joint, the latter of nearly an equal width, its upper and lower edges only slightly convex. Body yellow, mesonotum with three broad vittæ and the narrow lateral margin brown, the median vitta extending from the front end to slightly beyond the middle, the next two unite at the hind margin of the mesonotum, a spot near center of pleura, the breast, middle of metanotum, and a crossband at base of each abdominal segment, brown ; mesonotum opaque, gray pruinose, the abdomen polished, scutellum with a brownish spot at the middle of its base ; legs yellow, the tarsi brown ; halteres yellow, the knobs on greater part of upper side and at base of under side brown ;

wings hyaline, a brown spot at base of second submarginal and each posterior cell, also at middle of first basal and at base of discal cell; space between apices of auxiliary and first vein yellowish, the costal margin beyond apex of first vein bordered with smoky brown, veins at bases of second submarginal and third posterior cells appendiculate. Length, 5 to 6 mm.

Two females, one collected at the Rio Ruidoso, White Mts., New Mexico (altitude about 6900 feet, C. H. T. Townsend), the other collected by Mr. Schaeffer, in June, at Brownsville, Texas.

Type. — No. 7352, U. S. National Museum.*

Holopogon latus, new species.

An unusually broad, robust species. Black, the halteres yellow, their bases brownish; hairs and bristles white or yellowish, hairs of mesonotum except posteriorly very short and sparse. Head gray pruinose, hairs of mystax very sparse, the bristles confined to two or three rows along the oral margin; first two joints of antennæ subequal in length, together about three-fourths as long as the third, the latter slightly longer than the slender style. Thorax and scutellum opaque, grayish pruinose, mesonotum with three confluent brownish-black vittæ, abbreviated posteriorly and the outer pair much abbreviated anteriorly. Abdomen somewhat polished. Hind legs considerably thickened, the tibiæ on the outer and inner sides and the first tarsal joint both above and below quite densely fringed with rather short hairs. Wings from base to beyond apex of discal cell dark brown, the limits of this color strongly arcuate, the remainder of the wing hyaline; apex of second vein before middle of second submarginal cell; wings very broad, the alulæ quite strongly developed. Length, 6 mm.

A male specimen collected in April.

Stenopogon tenebrosus, new species.

Near *consanguineus*, but much darker, the wings brown and without any yellow coloring. Black, the halteres, pulvilli and bases of tarsal claws yellow, a reddish yellow vitta on upper side of front femora, hairs and bristles yellowish-white, those on the hypopygium and in middle of mesonotum chiefly black; third joint of antennæ narrow and elongate, about seven times as long as the style; body grayish-pruinose, very thin in middle of mesonotum, the hypopygium polished; mesopleura bare, hypopleura hairy; wings, including the veins, brown, rather narrow, the first posterior cell slightly narrowed toward the apex, the fourth closed far from the wing-margin; length, 22 mm.

A male specimen.

Stenopogon pumilus, new species.

Also near *consanguineus* but darker, the bristles of the legs chiefly black, etc. Black, the halteres yellow, upper side of first two pairs of femora, their tibiæ and tarsi

* In my table of the species of *Phthiria* published in the Trans. Am. Ent. Soc., XXI, pages 102 and 103, it is stated that *punctipennis* has a single black spot on each side of the face; specimens since examined which undoubtedly belong to this species have two black spots on either side, as ambiguously stated by Walker in the original description.

reddish-yellow, pulvilli and bases of tarsal claws yellowish, hairs and bristles yellowish-white, bristles of legs chiefly black; third joint of antennæ rather slender and elongate, about ten times as long as the style; body grayish-pruinose; mesopleura bare, hypopleura hairy; wings dark brown along the broad hind margin and apex, the remainder largely tinged with yellowish, veins brown and yellowish, narrowly bordered with grayish, first posterior cell scarcely narrowed toward the apex, the fourth closed near the wing-margin; length, 14 mm.

Two males collected in April and May.

***Stenopogon nitens*, new species.**

Distinguished by the polished abdomen. Black, the halteres whitish, pulvilli yellow and with two brown vittæ, tarsal claws reddish at the bases; hairs and bristles whitish, those on the antennæ, front, middle of mesonotum, abdomen except the first two segments, and on the legs except the coxæ, black, pubescence on inner side of front tibiæ golden yellow, hairs on lower side of front femora chiefly whitish; mesopleura bare, hypopleura hairy; third joint of antennæ rather slender and elongate, about sixteen times as long as the style; head and thorax grayish pruinose, the mesonotum, except along the sides and posterior end, somewhat polished; abdomen polished, a transverse, white pruinose streak in hind angles of segments two to five; wings blackish, tinged with yellowish in the costo-basal portion, veins black, first posterior cell considerably narrowed at the apex, the fourth closed in the margin; length, 16 mm.

A male specimen collected in May.

***Erax tuberculata*, new species.**

Distinct from all of the species known to me by the three large tubercles on the venter of the abdomen. Black, the halteres, tibiæ and bases of tarsi yellow, apices of the tibiæ brown; hairs and bristles of head and antennæ white, a pair of ocellar bristles, a cluster at middle of sides of oral opening, and the hairs and bristles of the palpi, black; third joint of antennæ ovate, subequal in length to the first, about one third as long as the style; middle of face strongly gibbous and covered with bristly hairs except on the upper fifth, eyes unusually approximated at their upper corners, strongly diverging below. Thorax gray pruinose, marked in the middle with three black vittæ, the middle one narrow and not reaching the suture, the outer ones prolonged slightly beyond it; hairs of anterior half of mesonotum short, black, those along the margins chiefly white, the posterior portion bearing many long, chiefly white, hairs, the bristles mostly black; hairs of pleura and scutellum white, scutellum bearing two white bristles. Abdomen gray pruinose, when viewed from behind there is revealed a large, subtriangular black spot at the base of segments two to six, hairs of the abdomen white, those on the dorsum sparse and short, those on the upper side of the very large, polished hypopygium black; just behind the center of the under side of segments four, five and six is a polished tubercle which is nearly as long as the second tarsal joint. Hairs of legs white, the bristles of the first two pairs of femora and tibiæ chiefly white, those of the tarsi and hind legs black. Wings hyaline, costa scarcely thickened beyond apex of auxiliary vein, third vein forks beyond apex of discal cell. Length, 12 mm.

Three males, two of them collected at San Diego, Texas, April

30, by Mr. E. A. Schwarz, the other collected at Brownsville by Mr. Schaeffer, in April.

Type. — No. 7353, U. S. National Museum.

Anastrepha pallens, new species.

Distinguished by the three colored scutellum. Yellow, a vitta in middle of mesonotum, a broader one each side, the humeri, several spots on the pleura, a pair of spots in front of the scutellum and apical half of the latter, whitish, base of scutellum yellow followed by a brown fascia, a pair of brown spots in front of the scutellum, situated outside of and contiguous with the whitish ones; mesonotum not pruinose; wings hyaline, a spot beyond the humeral crossvein and the stigma yellowish-gray, a very faint pale grayish crossband extends across the wing at the hind crossvein and is narrowly prolonged along the costa to the tip of the fourth vein, hind margin of the wing also very pale grayish (specimen immature); length, 6 mm.

A male specimen collected in June.

Sepsis pleuralis, new species.

Recognizable among the unspotted winged forms by the wholly yellow pleura. Yellow, the front, upper part of occiput, mesonotum except the lateral margins, middle of metanotum and dorsum of third, fourth and base of fifth segment of abdomen, black, upper side of scutellum, posterior margin of second abdominal segment, and last three joints of the tarsi, brown; front polished, mesonotum subopaque, thinly brownish pruinose, metanotum polished and with a brassy tinge, dorsum of abdomen opaque, somewhat scabrous and with a strong bluish tinge; under side of front femora at two thirds of the length bearing an outwardly projecting tooth; wings hyaline, the base of the costal cell to slightly beyond the humeral crossvein, dark brown. Length, 4 mm.

A male specimen collected in June.

A NEW CERATOPOGON FROM BRAZIL.

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Ceratopogon guttatus, new species.

Black, the antennæ and apical portion of tarsi brownish yellow, mesonotum yellowish brown, humeri, scutellum and narrow ends of tibiæ yellow, halteres whitish, all hairs yellow; antennæ considerably longer than the head and thorax united; mesonotum opaque, yellow pruinose, the posterior portion whitish pruinose, abdomen opaque; legs slender, devoid of spines, a few rather long hairs on the tibiæ, first joint of hind tarsi nearly twice as long as the second, the penultimate joint nearly as long as the last one, claws equal, small, empodia wanting; wings hairy on about the apical half, base of wings to apices of first and fifth veins whitish-hyaline and marked